Bringing Evidence to Practice: Implementing Delirium Care in the Era of the Age-Friendly Health System

Presenters: Esther Oh, MD, PhD, Christine Waszynski, DNP, APRN, GNP-BC FAAN, and Emily Carter, MD

Time	Section
02:33	**Introductions (Order of presenters: Esther Oh, Christine Waszynski, and Emily Carter)**
05:30	**World Delirium Awareness Day (WDAD)** • Delirium in a more global way • March 15th, 2023 (over 36,000 delirium screening over several countries) • WDAD US stats and info
06:41	**The Scale of Problem** • 34 million hospitalizations in 2021 o 13.2 million in older adults ≥ 65 • Upwards of 2.4 million adults ≥ 65 experience delirium • One older adult develops delirium every 5 minutes

07:25	**Harnessing the Momentum of a Social Movement Age-Friendly Health System (AFHS)**
	• John A. Hartford Foundation and Institute for Healthcare Improvement
	• An essential set of evidence-based practices which causes no harm and aligns with What Matters to the older adults (4Ms- What Matters, Medication, Mind, and Mobility)
	• Two key drivers of AFHS—Assess and Act On
	• Opportunities and Synergism
	  o American Hospital Associations (AHA) Hospital Statistics 2023
	  ▪ Total number of all US hospitals: 6,129
	  o Institute for Healthcare Improvement (IHI) has recognized 3,400 hospitals as Age-Friendly Health Systems as of October 2023

09:19	**Integration of Age-Friendly Concepts into the ADAPT Program**
09:53	**ADAPT- Making Delirium Awareness a Priority** • Began in 2011 • Supported by hospital administration • Inter-professional team (representation across departments and disciplines n=42) • Plan for structure (delirium care pathway) • Build supports in HER to guide documentation and gather data • Education (classroom/CESI/bedside) • Adjunct Support (volunteer programs; therapeutic activities) • Quality/research/feedback
11:18	**Building Blocks For A Delirium Program** • AFHS (2018), ADAPT (2011), NICHE (2003)

12:10	**Strategies for Buy-in for Age-Friendly Delirium Care**
	• Define how the 4 Ms framework of delirium care
	  o Aligns with organization's mission/vision and values
	  o Fits into the balanced score card and quality measures
	  o Promote optimal wellness/recovery and eliminate patient harm
	  o Provide optimal patient/family experience
	  o Support the staff
	  o Seek executive sponsors from various disciplines
	  o Identify existing resources
	  o Geriatric and psych liaison services
	  o Active volunteer department
	  o Available data and research expertise identify opportunities

	○ Philanthropy ○ Use own data to demonstrate issues and impact over time ○ Involve front line staff in identifying the issues and solutions
14:52	**Screening for Delirium is the Key to Prevention** • Screening starts in the Emergency Department where all persons 65 and older are assessed and triaged with SQID question and attentional test • All patients admitted to Hartford Hospital are screened by their nurse each shift (3 or more times daily utilizing the CAM or CAM-ICU) for the duration of their stay and have prevention strategies employed for those at high risk of delirium • Once an abnormal screen is identified, protocols guide evaluation and management • This process has allowed us to create a registry of patients based upon their screening results • Since the start of this project 12 years ago, we have screened over 450,000 patients, with over 7 million assessments completed
17:07	**Delirium Rates Vary by Service (ADPAT data)** • Data to show that delirium was a problem at Hartford Hospital—CAM rates for surgical patients (19%) • Delirium has Serious Consequences ○ Medical and surgical patients for length of stay: 3x longer with delirium than without and mortality rate is higher • Delirium Patients Have Poorer Outcomes at Care Transition ○ Very high significant death rates
19:34	**Delirium Increases Healthcare Costs** • Nationally ○ Hospital cost > $8 billion annually ○ Post-hospital costs ~ $100 billion; direct and indirect (SNF & Home Care) • At Hartford Hospital (ADAPT data): attributable cost July 2015- June 2016 ○ 35,700 delirium attributable hospital days ○ Total attributable cost estimate $96 million ○ 2000 patients D/C to SNF were attributable to delirium
20:30	**Delirium is Associated with Higher Costs for Colon Surgery (ADAPT data)** • Found $573 additional dollars per day due to delirium
21:09	**Application of Universal Evidence-Based Best Practice Strategies** • Information in Patient Handbook—patient and family to report S/S of delirium promptly. Family encouraged to participate in care • Delirium assessment integrated into rounds and handoffs • Early mobilization/noise reduction/sleep enhancement efforts • Personalized care "Hartford HealthCare Cares About Me" poster • Creation of sensory modulation room for patients and families • Volunteer programs that focus efforts towards patient experiencing or at high risk for delirium ○ Keeping in touch volunteer visiting program, meal mates, activity cart, safety volunteers, mobility volunteers • Activated HER alerts on medications that may cause delirium • Standardized provider order sets • Nurse experts/consultants to coach frontline staff at the bedside • Provide data driven feedback to change practice
25:22	**Wear and Tear Pathway (guide)** • Large flowchart diagram • Resource guide
26:39	**Delirium Attributable Days**

	• Outcomes of how successful the program was • When added Age-Friendly, additional decrease in CAM+ days • ROI Calculator applied to ADAPT o Estimated cost savings or cost avoidance of $6.5 million annually attributable to the ADAPT program

28:21	**Additional Quality Measures to Track**
	• Process Measures:
	  o Mobility (ambulation), Accuracy of delirium screening, Avoidance of deliriogenic medications, Use of one-to-one sitters, Opportunities for family caregivers, Use of non-pharmacological interventions
	• Outcome Measures:
	  o Preventable falls with injury, Delirium rates, Restraint use, Length of stay, Mortality rates, Discharge Disposition (home vs. facility), Unintentional weight loss, Patient & family satisfaction

29:49	**Barriers and Approaches**
	• Barriers:
	  o Failure to appreciate delirium as prevalent and costly
	  o Failure to make delirium prevention, detection and action a priority
	  o Time and resource constraints to implement non-pharmacological interventions
	• Approaches:
	  o Implement universal delirium screening and analyze facility data
	  o Implement a delirium care pathway with coaching and accountability
	  o Recruit volunteers; philanthropic funds to purchase items; supply chain integration; bedside experts to coach staff

32:19	**Summary** • Link 4M based Delirium Care to organizational goals • Involve executive sponsors to demonstrate organizational commitment • Use your data to identify the impact of delirium • Use your data to demonstrate improvement in quality measures • Support your staff with resources required for excellent delirium care • Celebrate successes!
33:06	**Implementing the 4Ms: Specialized Care to Sustainable Systems**
33:32	**Background** • Maine is the oldest state in the nation according to the US Census Bureau, with 22.5% of the population over 65 years of age (2022) o Projected to increase over time • In FY19, MMC saw just under 13,000 patients age 65 and older, a 2% increase from FY18 • We need a way to provide consistent, best practice to all older adults who enter our health system

34:57	**Age-Friendly Health Systems Journey at Maine Health**
	• Began in 2018 and continues
	• Starts with HELP
	  o Hospital Elder Life Program
	  o Maine Medical Center
	  ▪ 627-bed teaching hospital in Portland, ME
	  ▪ HELP established in 2002, Center for Excellence in 2010
	  o Southern Maine Healthcare
	  ▪ 150-bed community hospital in Biddeford, ME
	  ▪ HELP established in July 2021

38:23	**Assess: What are we already doing?**

	• Crosswalk→ knew they were working with mentation, medications, mobility, and address what matters (this piece they started to build)
40:14	**Act On: What Matters** • Developed What Matters tool incorporated into all stages of care • EPIC can incorporate Age-Friendly care into routine care
41:36	**Next Steps** • Assess: Geriatrics Scorecard • Act On: Partnership development (Trauma, Cardiology, emergency Medicine, Adult Medicine); Interdisciplinary Engagement (providers, pharmacy, nursing, therapy, SW, care)
45:58	**Tool Kit** • Age-Friendly Health Systems o Working with many departments and developed many materials
46:31	**What Matters Tools** • Table of tools developed to address the What Matters aspect o What Matters flow sheet, EPIC Dotphrase, MH Nursing Home Smartblock (EPIC smartblock), What Matters documentation
48:13	**Mobility Tools** • Table of tools developed to address the Mobility aspect o BMAT, Ambulation, etc.
49:05	**Medication Tools** • Table of tools developed to address the Medication aspect o Several video modules, ongoing education, etc.
49:26	**Mentation Tools** • Table of tools developed to address the Mentation aspect o CAM assessments, delirium posters, etc.
50:34	**Sustainable Systems** • Flowchart • Using EMR is a huge part of this • Use these tools for medications all the time
52:18	**Age Friendly Order Sets** • Developed for a doctor to use for his patients and hopes to use across surgical services

53:38	**Take Aways**
	• Age Friendly care IS delirium prevention; Delirium prevention IS Age Friendly care
	• Start where you are, take your easy wins, gain momentum
	• Assess and Act On the needs of your clinical partners
	• Build systems to support sustainability (make it easy)
	• Resources for support:
	  o Institute for Healthcare Improvement (IHI) (including Action Communities)
	  o John A. Hartford Foundation
	  o American Geriatrics Society, including Age Friendly Resource Library
	  o American Delirium Society

55:11	**Questions and Answers**